



Notes on the Javanese

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The following paper was then read by the director in the absence of the author:—

NOTES *on the JAVANESE.* By A. H. KIEHL.

AMONG the many islands which compose the so-called Malay Archipelago, the Island of Java is undoubtedly the most important, because of its extensive commerce, its great fertility, and by reason of its being the seat of the Dutch Colonial Government. It is mountainous and of volcanic origin; its south coast is bold and rocky, but its north coast is low and swampy, especially near the rivers, which wash down the soil from the mountains and deposit it in extensive mudbanks at their mouths; a fact which tends materially to increase the superficial area of the island northward, but which is a serious obstacle to the formation of artificial harbours. It is one of the numerous volcanic islands forming a regular volcanic chain from Acheen Point to Ombay Straits. Off its northern shores numerous diminutive islands of coral formation are found, the coral-lines being still at work in some parts, while in other parts the coral rock is left by them to decay.

It is situate between the 6th and 9th parallel of south latitude, and the 105th and 115th meridian east of Greenwich, and enjoys a season of dry and fine weather from April to October, and a rainy season from October to April. Its size is about equal to that of England (Java 51,336, and England 50,922 square miles), and its population, which, according to Mr. A. R. Wallace (Malay Archipelago, Vol. I), amounted in 1826 to $5\frac{1}{2}$ millions, and in 1865 to $9\frac{1}{2}$ millions, has actually trebled in 48 years, for by the last census it was $16\frac{1}{2}$ millions (1874), giving an average of 320 persons to the square mile, as compared with 260 persons to the square mile in the United Kingdom (21,500,000 in England, 1,212,000 in Wales, 3,360,000 in Scotland, 5,403,000 in Ireland = 31,475,000, or 121,608 square miles), and being yet annually increasing. The great fertility of the country, however, will allow of a very much larger number of inhabitants, there being yet plenty of uncultivated tracts of land overgrown by luxuriant vegetation (according to some authorities only one-third is cultivated), where the tiger, the rhinoceros, the wild boar and the ape, roam unmolested.

I consider the aborigines of Java, Madura, and Bally, to consist of two different branches of the Malay race; the Malays proper forming the one, and the Javanese proper, the Madurese, and the Ballinese forming three different families of the other branch.

a. *General description.*—All these four have much in common, their stature being comparatively small, only reaching a little above the shoulder of an average-sized European: their colour is light-brown, their hair jet-black and straight, their eyes dark, their noses flattened, their nostrils distended, their teeth regular, and their bodies are well-proportioned. Their limbs, and especially their fingers, are very pliable, and they seldom grow corpulent, and never very old.

b. *Distinction between Javanese and Malays.*—Notwithstanding all these points of resemblance, there is but little difficulty in distinguishing the Javanese from the Malays proper. Of the two, the Malays are the smallest and stoutest, their heads are more globular, their faces rather broader and flatter, and their noses rather shorter than those of the Javanese: but besides this, they wear their hair cut and loose (the males), whilst the Javanese and Madurese always wear it long, and tied up in a knot at the back of the head like a woman's. The Ballinese, again, wear it long and loose, only tied by a ribbon or piece of cloth so as to prevent its hanging over the face. These latter are decidedly stronger and taller, as well as more robust-looking than the Javanese. The Sundanese, who inhabit part of the west coast and the islands between Java and Sumatra, resemble the Malays in form and stature, although speaking another language. This nation may be said to be indigenous to those islands, whilst the Malays are known to have come from Sumatra, and to have spread all over the Archipelago in the course of time; yet the period when they settled in Java must have been a very remote one. There is good reason to believe that the name Java, or Yava, applied to Sumatra as well as to Java in olden times. That the Malays do actually belong to a different branch than the Javanese proper is shown, not only by their different language and peculiarity in dress, but also by their living together in villages apart from the Javanese, except in the western part of the island, where the Malays predominate, and where but few Javanese proper are found.

c. *The women.*—The Javanese women are small, have beautiful dark eyes, and long, thick, black hair, fine busts, and, when young, have beautifully white and regularly set teeth.

d. *Feet.*—As to the feet of these people, not being accustomed to wear shoes, their toes stand out, apart from each other; and the muscles of the toes are generally so well developed, that

they need not stoop down to pick up an object, but manage it very well with their feet.

e. *Languages*.—Of the Malay language, it is said that it is spoken from the Cape of Good Hope to the Molucca Islands, which probably means that there are some people found in the several countries enclosed within the above limits who speak it; but although this assertion does not rightly describe the true position the Malay language occupies, yet it is quite certain that from Acheen to New Guinea it is the language with which a traveller can get along, the same as with French on the Continent of Europe. It is a soft-sounding language, but poor in words, and contrasts in this respect unfavourably with the rich Javanese language (or rather languages), which has its own written characters and a literature of its own, and of which the Malays in Java have adopted many words and expressions, as they have also from the Portuguese.

Both languages are admirably adapted to poetry. Nearly every native of this country can extemporise little songs, and they are so fond of doing this, and conversing in this poetical way, singing their ditties in a whining, melancholy manner, that the singing of these so-called pantongs occupies nightly all the time between their lying down and their actually dropping off asleep.

f. *Cleanliness*.—As in this hot climate bathing is a great treat, and as the Javanese are very clean in their persons, the rivers of Java are hardly ever seen without at least some bathers of either sex. Both sexes are good swimmers, but they swim like dogs, stretching out first one arm and then the other, and the legs likewise. They wash their bodies, and especially their hands, very often; also they are very clean as regards their food, and wash their rice six or seven times before boiling it. The right hand prepares the food, and is never used for the purpose of taking up or throwing away dirt, which is always done by the left hand.

g. *Filthy peculiarities*.—In one respect, however, they are filthy. Whether from superstition or stubbornness, they do not use fine-toothed combs, and as their hair is long and thick, and kept covered by a handkerchief, they nearly all suffer from having a colony of parasites on their heads, which they have no means of getting rid of but that of asking a friend to help them. Friends so employed may be met by the score every day, and as some of these fellows are so tender-hearted as to be unable to kill these parasites, they often throw them away only, a fact which, I need hardly say, is extremely dangerous to passers-by.

h. *Articles of dress*.—The dress of the males consists of the *sarong*, a cylindrical piece of cloth, mostly coloured calico, about

2 yards wide and 1 yard long, which is drawn tight around the loins, and folded up in front, and then rolled up so as to keep it tight. A belt is then fastened over this. The *badjoe*, or jacket, has very tight-fitting sleeves, a standing collar, and a row of buttons, placed very close together. This is also mostly of calico, chintz, or print, but the chiefs and princes often wear fine cloth, or velvet jackets, with white waistcoats underneath, having gold buttons. The *tjelana*, or trousers, generally worn short by the Javanese, but long by the Malays. The *stangan kapala*, or head-kerchief, worn in different ways by the Malays and by the Javanese, the latter, as well as the Madurese, winding it around their heads and the knots of hair at the back of their heads, leaving the two tips to hang loose behind, and the Malays generally hiding the tips, and wearing them more turban-like. The Ballinese merely use narrow strips of cloth around their heads, exposing their thick hair to the sun's rays, and allowing it to flow loose behind. Around the loins, over the belt, the Malays and Javanese wear one or more scarves, under which the purse or money-bag is concealed, and into which the kreese or dagger, with its scabbard of bamboo, brass, or even gold, is stuck at the back. Those who cannot afford the luxury of a kreese, always carry a chopping knife, or a small hatchet in their belt. The Malays often dispense with the sarong, or tuck it up high; the Javanese often dispense with the trousers, but when out hunting, it is a common thing for them to wear long trousers, with straps passing under the feet, and leather gaiters besides, which leave only the toes uncovered.

The dress of the females resembles that of the males, except in the matter of the head-kerchiefs and the trousers, which they never wear. The *badjoe*, or jacket, is not worn by adult females; it is longer than that of the males, and is superseded by the *kabaya*, or tunic of white or coloured calico, or silk, which is worn open in front, or crossed over the breast. The *sarong* is worn like that of the males, and consists of the same materials. The *slendang* is an article of dress resembling the sarong; like it, it is worn around the loins, over the sarong, or slung over one shoulder; or used to carry a child or any other load in, as the case may be. The well-to-do women often wear very costly belts around the loins, also bracelets (*galangs*) and rings. The sarongs and slendangs are sometimes of very rich material. The slendang is waved about very gracefully by the *ronggings*, or female dancers, at evening parties or festivals; and such is the charm it then possesses, that no male member of the company will refuse to take hold of the other end of the slendang which is offered him by a pretty rongging, and to dance with her for a while. A pair of pretty, gold embroidered little slippers, which

only hide the toes in part, are often worn by rich ladies, and sandals are sometimes worn by the men, but in other cases the legs and feet are bare.

The hair, which is shining black, is often adorned with flowers, and very often odoriferous herbs are tied up in the knot of hair. The men also will adorn their hair with flowers on festive occasions. They also often protect their eyes against the fierce rays of the sun by a screen or cap without a crown, but more often by the *toodoong*, or sun-hat, a sort of umbrella shaped contrivance, made of bamboo, and coloured or gilt and varnished, so as to make it impervious to either sunshine or rain. The ladies, however, prefer the *payong*, or sunshade, which article is also extensively used by the males; a prince or a grandee being distinguished by this or that particular sort of sunshade (the very highest having one completely gilded over), which is carried by a servant walking behind him, another servant carrying the condiments for chewing the sirih and betel-nut.

The children of both sexes are allowed to go naked up to their eighth or ninth year, and it is not at all unusual to see a little girl running about in that state one year, and to find her back a married woman, or even a mother, at the end of the next. The boys are circumcised about the same age, and from that moment they go fully dressed, whereas they either go entirely naked, or have only a sarong slung over one shoulder, or girt round the loins shortly before.

i. *Horsemanship*.—The Javanese are very good horsemen, but their horses are small, not larger than small ponies, but very spirited. Their saddles are different in shape from ours, and in riding, the Javanese only puts his big toe into the stirrup, instead of the whole of the foot.

It is a mark of respect for a rider to dismount, sit down by the roadside and uncover when a personage approaches, and not to mount again until he has passed. Princes and rulers are always so revered, and often the horseman follows in their suite for a while before he proceeds on his own journey.

j. *Sitting*.—To sit down in a crouching attitude is considered respectful. A servant when he has a long report to make, or to listen to his master for some time, always sits down on his haunches. If, however, the talk is not likely to last long, he only bows, lifts his hands as if for prayer, and joining them together, lowers them until they reach his knees; this being repeated as often as he has to give a reply. Whenever a Javanese wants to make himself thoroughly comfortable, he always sits down on his haunches, or lies down altogether, laziness not being considered a vice, nor yet an improper thing, but something natural, like hunger and thirst. Chairs are now in

general use by the more refined Javanese, especially easy and rocking chairs; but yet the national custom is always to lie or sit down on the floor, or on the bamboo couch which is fixed in every house, and serves for seat, table, and bedstead alternately.

k. *Bedding*.—The *tikar* or mat, and the *bantal* and *bantal gooling*, square and round pillows, filled with kapoc, constitutes all the Javanese's bedding, which he can roll up and walk away with quite as easily as the healed Hebrews of the New Testament. He rolls it out at night, and spreads it on his *bali-bali*, or couch, and in the morning he rolls it up again, and puts it into a corner.

l. *Houses*.—The houses of the Javanese and of the Malays are built of bamboo, roofed with leaves of the sago or other palm tree, and are only one story high. They contain neither fireplaces, chimneys, nor glass panes in their windows. Those of the poor have no other flooring than the ground, one or two *bali-balies*, at a height of about 3 feet, and a sort of attic under the roof. Those who are better off have houses containing two, three, or more rooms, and a verandah in front, and also at the back. The flooring is made of split bamboo, flattened out into boards; they also have a sort of Venetian blinds in the windows and doorways and outhouses for cooking, which the poor people always do in the open air.

Under the shadow of the overhanging roof, naked children, fowls, goats, and tame monkeys, may often be seen playing about and running in and out of the never closed doors. Under the mighty cocoa-nut trees, which are quite indispensable to the existence of the Javanese, or in a sort of stable, one or more cows or bullocks, a cart, a plough and a hoe, rude implements of agriculture, are often met with; and wells, with brick-built and white-washed walls, are found in abundance near every village.

A substantial one-roomed bamboo house could be built (in 1850) for three rupees (5s. sterling). It takes a few weeks to build one, but it takes far less time to take it down and remove it. A gentleman at Sourabaya, having bought some land for a shipbuilding yard, stipulated that the ground should be cleared of buildings at a given time. Some hundred dwelling-houses stood on this ground, in fact, quite a village, and when the ship-builder saw nothing done up to the day before the stipulated time, he complained to the magistrate, who put him off till the morrow. What was his surprise when he visited the spot on the forenoon of the next day, and found not a vestige remaining of the entire village, may be better imagined than described. Early in the morning each of the occupants of every house had lent a hand, carrying away his portion of building material and furniture; so that no longer any ground of complaint existed.

The houses of the Ballinese are built of stone (unhewn), with finely carved and painted pillars of wood inside, supporting the roof, decked with pantiles or bamboo, and palm leaves. The door gives entrance into the middle of the only room, and facing it is something resembling an altar. A bamboo couch extends on each side, from wall to wall, and the bedding consists of well-made mattresses, stuffed with kapoc. One or two steps of stone often lead up to the door.

m. *Utensils for cooking, &c.*—Rice being the staple article of food of the Javanese and Malays, a few neatly made baskets of bamboo, in which it is washed and often also steamed, a bamboo sieve, a cocoanut ladle, two or three copper or earthenware pots, and a saucer with a wooden rubber to rub the sambal (a condiment for the rice), and sometimes a china basin and spoon, is all the housewives want for their cooking utensils. A yoke, two pairs of bamboo water-buckets, or a pair of water-baskets, and a broom of rice-straw with a bamboo handle, these complete the list of articles for household use. They eat with their fingers and drink from the ladle or out of a water-bottle without touching it with their lips, pouring it into their throats in a small stream.

n. *Food.*—1. (*Cocoanuts.*) Next to the rice, of which I shall treat more at length, the cocoanut is the most indispensable article of food to the Malays and the Javanese. Whenever a child is born, a cocoanut is planted, and this is the only record held of its age. If it asks how old it is, the parents point to the young tree, telling the child that it is as old as that tree. When the cocoanut has grown to its full size, the outer shell yet being green, the nut contains water only, which is then a very favourite drink, and it is certainly very refreshing, although not what we would call nice. When the colour of the shell turns yellow and brown, the woody shell commences to form, and a thin coating of the real nut, like the white of a soft-boiled egg, commences to gather against the sides. This, when scraped out with a spoon, is very nice to eat, and the water inside is then still good and refreshing. But when the nut is ripe, and the wooden shell quite hard, then the outer shell has already become hairy and the water inside is no longer considered a nice drink. It is mostly thrown away, but the nut is taken out, rasped, steeped in hot water, and pressed out, the milky juice being used for cooking. Or the nut is boiled for the making of cocoanut-oil. Often the rasped particles are fried and used as condiments to the rice. To climb up a cocoanut tree, the Javanese takes a handkerchief or a string, ties it into a sling, into which he slips his feet, and then places them against the tree, one on each side, adjusting the sling so that it will suit the size of the tree. He

then takes hold of the stem with his hands, reaching as high up as he can, draws his knees up to his elbows, presses his foot-soles firmly against the stem, so as to obtain a firm footing, and repeats this operation, by which he gains about a foot and a half each time, as often as required, until he reaches the top, when he grasps a branch with his left hand, and with the right hand reaches his *parang* or chopping knife, with which he cuts off as many nuts as he wants, letting them fall to the ground. Some of the lower trees he cuts steps in, by which the ascent is easily made.

2. (*Bananas.*) The banana or pisang tree is also very useful to the Javanese. The better kinds of this fruit are very sweet and agreeable to the taste. When unripe and boiled, it resembles the potatoe, but it is in West India and not at Java that it is so prepared; when ripe, it is either eaten raw or coated with dough and fried in cocoanut-oil. When dried, it tastes like the date. The leaves are used for packing purposes, like paper in Europe. At every bazaar pisang-leaves are sold, together with small bamboo-pins; and anything eatable which is sold there is wrapped up in a pisang-leaf and pinned up with bamboo. The stem of the tree is used for sticking the figures of the *wayang* or theatrical performance in.

3. (*Insects as food.*) Under various circumstances the Javanese will eat different insects, such as white ants, cockroaches, locusts, and even the abominable *walang sangit*, a species of cricket which emits a very foul smell; but of pork they have an undisguised abhorrence, like faithful Mahometans. These remarks apply also to the Malays.

4. (*Sugar.*) Besides from the sugar-cane, the Javanese obtain sugar from the cocoanut water, and from the sap of the areng palm. It is sold in half-spherical lumps, and is nearly black.

5. (*Condiments to the rice.*) Salt and cayenne pepper, fried shrimps or other fish, salted or fresh, onions, garlic, cucumbers, and other vegetables are used as condiments to the rice, and the favourite compound is sambal, consisting of chillies, onions, salt, and *trasse*, mixed and rubbed to a paste in a dish or saucer. This *trasse* is salted shrimps in a state of half putrefaction. Eggs, salted and boiled hard, are also used. They are salted by being put into salt clay. Maize and Yams are also used for food at times.

6. (*Rice.*) The numerous appellations given by the Javanese to rice in its various forms and conditions, sufficiently indicate the great importance attached to this grain by the natives. A rice field is called a *sawah* when the rice is cultivated in irrigated fields (in the plains or on the mountain slopes), a *tipar* when cultivated regularly but without artificial irrigation, and a

gaga when the rice is sown in recently and but imperfectly cleared ground on the mountains. The young shoots are called *beebit*, the growing corn is called *padie* (*paree* in Javanese), when separated from the straw it is called *gabbah*, when the husk is taken off it is called *brass*, when boiled dry it is called *nassee*, and when boiled wet as in Europe, it is called *booboor*. It is then often boiled with cocoanut-milk.

The Javanese are very fond of agriculture, and especially of the cultivation of rice. For this purpose many mountain slopes have been transformed by them into immense flights of steps or terraces; each terrace or *pittakh* being perfectly level and bordered by a dam. A beautiful system of irrigation allows these fields or terraces to be inundated or watered and drained as occasion requires, and some mountains are so cultivated up to a height of between two and three thousand feet above the sea level. Nothing can equal the beauty of these velvet-like steps up the mountains, traversed by little rills of water, glittering in the bright sunshine.

o. (*Cultivation of rice.*) In order to obtain a crop of rice, it is not sufficient that the ground be ploughed three or four times over, and then be sown with corn; on the contrary, it requires the planting out, one by one, of the young rice plants or *beebit*, previously closely sown in separate fields. Women and children generally undertake this task. The so-planted fields are kept under water for several weeks, being only occasionally drained off for a day and then irrigated afresh. Only when the plants are full-grown the fields are allowed to become dry. Then it is that long strings are spread out over the fields, having numberless little rags, dolls, bamboo-bells, and ornaments attached to them in order to scare away the birds, especially the so-called Java sparrows (*Fringilla oryzovora*); and these strings are every now and then shaken by the little folks whose duty it is to watch them, from little bamboo-huts forming centres to these gigantic cobwebs. Some miniature windmills may also be seen in full swing; these are placed there to frighten away the evil spirits. When at last the crop is ripe, the fields have entirely dried, and the reapers, men, women, and children, hasten to the harvest with songs of gladness, dressed in their gayest colours, and adorned with flowers. Popular prejudice, and not necessity, obliges the stalks to be cut, one by one, about a foot below the ear, by which process the whole of the valuable rice-straw is destroyed, for it is too short for use, and the rest, being stubble, is burnt. The rapidity with which the cutting proceeds is astonishing, if it is considered that the stalks are cut one by one, yet if contrasted to the European modes of reaping, it may be considered a slow process. The wages earned are paid in kind,

and are carried away every evening by the women in their *slendangs*; they range between twelve and twenty per cent. of the crop reaped. The remainder is garnered in *lombongs* or barns of square forms, widening towards the top, built on poles erected on large blocks of stone. *Kandang*s or stables are used for the bullocks, of which the farmer seldom owns more than two, and mostly only one. They are called *kerbo*'s, and are very lazy, but very intelligent, and as faithful as dogs. They delight in bathing and covering themselves with mire, by which means they keep off the sting of insects.

The different seasons for the cultivation of the rice, for sowing, planting out, drawing off, reaping, &c., are appointed by the priests, and vary in their duration from 25 to 40 days.

Superstition also prevents the Javanese from applying other manures to their rice-fields than the ashes of the stubbles and the mountain-water, which latter, no doubt, formerly answered well enough, but which now often fails to supply all the necessary fertilising ingredients, these having in the course of time gradually been washed down from the mountains and absorbed in former crops. The crops might certainly be doubled, if not trebled, under proper treatment; proofs thereof are not wanting in the lands owned by European landowners, but the soil belongs to them, say the Javanese, and they mean to do with it according to their *hadat* or custom!

A great loss is also occasioned by the manner in which the rice is deprived of its husk. This is done by pounding it with a wooden pestle in a large wooden mortar, and a large percentage of the corn is thus broken, and much is ground to powder; so that about twenty per cent. altogether is lost for human food. Yet it is so difficult to convince them of their errors, that whereas steam and water-mills exist, owned by Europeans and Chinese, in which natives are employed, yet the number of native mills is extremely small.

Numberless are the forms in which rice is eaten. Dry or wet, in the form of a mass of gluten, or in that of nice cakes, in leaves, or in little mats, in nearly all these forms it is obtainable, together with some condiments at the bazaars, or at the corners of the streets or roads. For about twopence visitors may obtain at the stalls in the bazaars a leaf of beautifully white rice, a saucer of fried shrimps, some sambal, fruit and sweets, together with some cooling drink, or, if he prefers, a cup of execrable coffee over-sweetened and without milk, which is the way the Javanese always drink it.

Rice is sold by the *gantang*, a measure made of a large coconut-shell so as to contain about $1\frac{1}{2}$ lbs., or wholesale by the *picul*, about 130 lbs. English. A *koyang* contains 100 piculs.

p. *Cultivation of fruit and other trees.*—Although the Javanese are very fond of agriculture, it is a remarkable fact that they do nothing to improve their fruit trees. The only efforts in that direction have been made by the Ballinese. The way in which cuttings are obtained, however, is deserving of notice. In that hot climate cuttings, if planted as they are in this country, would dry or become scorched. The practice of the Javanese, however, is to put a lump of damp earth around the branch just above the place where it is intended to cut it, and to wind a leaf around it. After a certain time tiny roots shoot out from the branch into this lump of earth, and when these have become sufficiently large and strong, the branch is cut below the lump, the leaf removed, and the whole carefully planted in a shady place.

q. *Salt-making.*—Salt is obtained by letting the sea-water into enclosed fields at high water, and then shutting it off. The rays of the tropical sun soon cause the water to evaporate, when the salt remains, imperfectly crystallised, brown from the mud, and smelling strongly of the fishy remains which adhere to each crystal; and it is in this repulsive state that it is most relished by the Javanese, who for it reject the finest white salt.

If you want to remain on friendly terms with the people of the districts where salt is made, you should not protect your head against the fierce rays of the sun by a sunshade or a sun-hat, as popular prejudice is very strong on this subject.

r. *Music.*—The musical instruments of the Javanese consist of the *Biola* or one-stringed violin; of different sets of hand-bells arranged in frames, some frames containing four low-toned bells, others as many as 12 or 14; then they have several pairs of gongs or tamtams of different sizes and tones; one very large gong; and, finally, an instrument of a coffin-like form containing, say, 15 small pieces of flat cut bamboo, arranged in a row, and played upon by a small wooden hammer with a long and pliable handle; the longer pieces of bamboo sounding the lower notes, and the shorter ones the higher notes. All the other instruments are played upon by muffled or unmuffled hammers, varying in size, except the biola, which is played upon by a bow.

The biola leads off and gives the tune. Music notes are never read from, everything is played from memory. Wind instruments are not used. A band generally consists of from 10 to 12 musicians, and on the whole the music is not unmelodious, but when heard for any great length of time it becomes rather monotonous. Such a band is called a *gamelang*, and without it no festivity is complete. The greater the festivity the longer the *gamelang* has to play, and at marriages it performs generally for three days and nights in succession, with but short intervals.

s. *Theatrical performance.*—The *wayang*, or theatrical performance, is a very favourite amusement. In the portal of a house, reaching from wall to wall, a large cloth is spread, behind which, at a reasonable distance, a lamp is placed. The artist who performs has a legion of finely cut flat wooden figures of the most grotesque forms, each of them armed with a sharp point at the bottom, with which it may be stuck into the stem of the pisang (banana) tree, that keeps the cloth down at the bottom. He moves the figures so that their shadows fall upon the cloth, and alters his voice to suit the characters of the performing figures. A peculiarly shaped figure, somewhat resembling a fir tree, is used to represent either a mountain, a tree, or a middle partition, as occasion may require.

All the pieces represented are historical dramas taken from the ancient and legendary history of Java. The houses being always open, a crowd generally gathers to witness the performance from the wrong side; and whenever any peculiarly striking or well-performed passage occurs, their applause will mix with that of the spectators inside, without anybody thinking this too much liberty.

t. *Other amusements, sports, &c.*—A very popular amusement is the bull-fight, on which often large sums are waged, but only by the owners of the contending beasts. Cock-fighting also is very popular; for this purpose the cocks are armed with long and sharp steel spurs. Crickets are also set to fight each other for the amusement of the people. A less common but always much enjoyed amusement is the fight of a tiger with a bull, which takes place within a strong bamboo enclosure, and in which the bull almost always gains the victory, the tiger often being too much frightened by the noise and by the sight of the people around him to be able to fight with any chance of success.

The Javanese are also very fond of gambling. In consequence of this tendency they often run into debt and then have to borrow money, for which the Chinese shopkeepers and money-lenders will take their labour in return. Chinese tradesmen are daily seen vending their wares from house to house, shaking their little rattledrums, and being followed by one or more Javanese carrying heavy loads of goods for their temporary master. A good many days the impoverished gambler will thus have to follow the well-dressed and clean-shaved Chinaman before he has regained by the sweat of his brow the money lost through one hour's gambling. Yet only very few grow wiser by the lesson.

Hunting.—Most of the Javanese princes and grandees are passionately fond of hunting, especially deer hunting. In the extensive forests and thickets of the interior of Java stags

abound, and to make these leave their retreats and to attract them towards the plains, the long grass or *alang alang* with which these plains are overgrown, is burnt off about a fortnight prior to the day appointed for the hunt. A very few days will suffice for the young grass to spring up again, and the deer then come out of the woods during the night to graze upon the plains. As soon as it has been ascertained that they are doing this, a number of sportsmen, often as many as forty, all of noble descent, gather together, and, placing themselves at about equal distances around the plain, they drive several buffaloes into the thickets to frighten out the deer, which the hounds then pursue, and try to drive towards their masters who lie in wait mounted on spirited horses of Persian or Arabian origin, and armed only with a short and sharp, slightly curved sword, with which they have to pierce the deer. [This is fine sport indeed.] The horses seem to be imbued with the same passion as their masters, for they literally fly along, through thorn-bushes, over hedges and brooks, making light of any obstacles, and never resting until the stag is pierced. But accidents of a serious and often fatal nature are by no means rare. Yet this rather adds to the charms of the sport, at least in the estimation of the true Javanese, whose religious conviction tells him that he will not die before his time.

u. *Religion and superstitions.*—The Javanese mind is full of superstitions. The Brahminical religion appears to have existed in Java from very ancient times, and to have been followed by Buddhism, such as it now exists at Balli and Lombok. The number of ancient temples now in ruins, built of huge blocks of stone, and most elaborately sculptured, and among which those of Brambanan and of Boro Bodor are the most noteworthy, denote the existence of a civilisation at a very early period in history, far beyond that of the Javanese of the present day. Other ruins exist of smaller temples, such as those of Djabang, near Probolinggo, which are built of bricks or tiles, without any trace of mortar. These appear to belong to a more recent period. In the fifteenth century the Mahomedan religion superseded Buddhism, and up to the present day the Javanese and Malays are Mahometans, at least in name. Sometimes, especially when incited by the priests, they become bigoted and enthusiastic; but as a rule their mind is bare of true religious feeling. At odd times a few such enthusiasts may be observed singing and praying in the porch of a *messigit* (mosquee) for the greater part of a night, but these are generally preparing for a pilgrimage to Mekka, or some less distant place, in order, on their return, to be ordained as priests, when they may wear turbans, and will commence a life of idleness, doing nothing, except

perhaps, inciting the populace to revolt, or to make *amokh*, and living like leeches, on the toil of their fellow men. But by far the greater part of the Javanese have no really religious feeling. They are naturally of a kind, peaceful, hospitable, and confiding disposition, full of reverence for their princes and native rulers. They look upon religion as a kind of custom, a *hadat*, as they call it, and they have as a rule no idea of a soul-stirring influence governing a man's actions. They like to enjoy the liberty of Islam, to marry more wives than one, but of the duty of abstaining from wines and spirits they think very lightly; yet it must be said they never drink to excess. They call upon "Allah," as being the only true God, of whom Mahomet is the prophet, yet there is hardly a being in the animal kingdom, or an object in nature, but in some parts of Java there are some people who either directly worship it, or ascribe to it some supernatural influence. The tiger, the cow, the monkey, the beautiful *waringgin tree*, and the stone image of antiquity, as well as the spirits of the mountains, are all worshipped, feared, or revered, as the case may be.

There is an island at the mouth of the Juana river inhabited by sacred (!) monkeys, who are regularly fed and periodically worshipped by the natives of the neighbourhood.

There is a steep cliff on the south coast of Java, in the crevices of which edible birds' nests are found. To reach these a perilous descent has to be made by means of ropes, and no native dares to go down these ropes without first propitiating the guardian goddess of the place with some offering or other.

In a field at Batavia, there was an old piece of cannon laid, which had served at the siege of Palembang; and this cannon was daily worshipped by numbers of persons of both sexes, who brought fruit, coppers, rice, and especially miniature sunshades, as offerings; these they stuck into the ground round about the cannon deity. To this gun was ascribed the power of curing sterility, and to receive its benefits the worshipper had to sit astride it for some time. At any time of the day you might see some of these women, attired in their very best, and adorned with flowers, sometimes two at a time, sitting on this gun; and this practice was continued for years, to the benefit of the priests, who pocketed the coppers, manufactured the sunshades, and sold them at a good profit. At last this cannon was removed by order of the Colonial Government, to the great dismay of the hadjees, but without injuriously affecting the increase of the population.

With regard to their religious feeling, it has been often said that but little good has as yet resulted from the missionary labours among these natives. This is true enough, but instead of ascribing it to the incapability of the Javanese for receiving

Christian truths, I would rather ascribe it to the very small number of really earnest and really competent missionaries, and to the uncultivated state of the Javanese mind at the present day. The next generation, better instructed, and not so thoroughly unfitted for religious thought by Mahometan licentiousness, will, I have no doubt, show better results. The bad example given them by European Christians, may be regarded as one very great deterrent from their embracing the Christian faith.

Circumcision is practised by the Javanese, and is generally made the occasion of great festivities. The hero or heroes of the day are then gaudily dressed and ornamented with bracelets, necklaces, and flowers, and have their arms, hands, and faces painted yellow. They are paraded in a carriage, behind which follow the family and friends, sometimes also in a carriage, but generally on foot; and a gamelang always accompanies the procession, a heavy gong going either in front, or in the rear, and a crowd always gathers, and partly follows the procession.

v. *Marriages*.—The ceremony of marriage is performed with much the same outward show and processions as that of circumcision. Now-a-days the bridegroom and bride, as well as some of the family, are often seen in a carriage; but the good old Javanese way is for them to be seated on horseback, riding side by side to the place of wedding, both dressed alike, with bare arms, and painted yellow, as in the case of circumcision; both ornamented with flowers, bracelets, and jewellery, so that it is difficult to distinguish the bridegroom from the bride. The gamelang accompanies the procession, and plays as long as the festivities last. The bride has to undergo a series of very trying ceremonies. She has to sit still, without moving, for a very long time, dressed up as a doll, to be stared at by the multitude of guests and visitors; and she is in reality sold by her parents, sometimes seeing her intended husband for the first time on the wedding day; sometimes being betrothed long before her tenth year. Little boys and girls are sometimes so married or betrothed before they can take care of themselves, and of course they separate after the ceremony, and return to their parents' homes.

Betel chewing and teeth filing.—As soon as a girl is married, she has her teeth made smooth by filing, and commences to chew *sirih*. The sirih is a creeper plant, resembling the convolvulus, and is cultivated in gardens. Every morning immense quantities of fresh young leaves are brought to market, and sold at every refreshment stall. Three or four of these leaves are taken together; a little lime, a piece of gambier, and a quarter of a betel or penang nut are folded up in them, after which the whole is

put into the mouth. After a while, when it has been ascertained that the spittle has assumed a vermilion colour, a pinch of finely-cut tobacco is rubbed once or twice over the front teeth, and then also put into the mouth. The Javanese, especially the males, are fond of taking the quid of tobacco between the lips, in front of the teeth, showing it partly protruding out of their mouths, whilst the sirih itself is lodged behind their double teeth. When a Javanese sits down on his haunches, chewing his quid in the manner described, he presents a very stupid, and, to European eyes, ridiculous appearance. Of course he cannot very well join in any conversation with this encumbrance between his lips, so the only words he utters are monosyllables. The use of the sirih turns the teeth quite black, and so a woman with black, smooth-filed teeth, may at once be recognised as either a married woman or a widow. Polygamy is allowed, and practised by the wealthy: bigamy is not uncommon, yet the majority of people have only one wife. They are very jealous, and often such jealousy leads to their making amokh (committing wholesale murder).

w. *Good workmen.*—As a rule, the Javanese are good workmen, and although they have not the ardour of the European working man at the outset, but commence work in a slow, almost lazy sort of way, yet as they keep on working incessantly, like a machine, never leaving off to rest or breathe, they do more work than any European in that hot climate can accomplish. In the art of making *kreeses* or daggers they excel, as well as in boat-building.

x. *Proas and Canoes.*—No nation in the world can beat the Javanese for fine models for boats and canoes. Their fishing boats are as swift as birds, shallow, like rafts, and sharp, like clippers; broad in the beam, fitted with two masts, and able to carry from twenty to thirty men, besides their gear, netting, and cargo of fish. They are timbered and planked, have raised stem and stern, like gondolas, and are painted white, with a mixture of lime and rock-oil. The smaller boats, as well as the canoes, which consist only of trees hollowed out and fashioned, are furnished with outriggers; for the spread of their canvas is enormous, compared with the size of the boat. The sails are of triangular form, resembling the lateen sails of the Mediterranean Sea. The larger proas are but clumsy compromises, between the European and Malay build and rig.

The Javanese carry on an extensive coasting fishery, and it is a pleasant sight to see all these boats proceed to sea with the landbreeze in the very early morning, and return with the fresh seabreeze in the afternoon, when the pressure upon their sails is often such, that in order to carry on, they have to rig out a plank

to windward, upon which one, two, or sometimes three men are standing, in order to prevent the water from coming over the lee gunwale. The boats are often gaily ornamented with streamers, and beads and flowers at their stems and sterns. In fishing, the nets are spread in a circle; and when half has been let down into the sea, a man descends with it into the water, which, as soon as the circle is completed, he commences to belabour with two pieces of bamboo. The fish, previously attracted to the spot by the throwing of bait (by a man stationed at the masthead), then disperse, and are entangled in the meshes of the net, after which both net and man are hauled on board.

y. *Weapons*.—The only native weapons now in use by the Javanese are the kreeses or daggers. The nations round about, in their wars, used bows and arrows, long lances, and klewangs, or short and broad swords, and there is no doubt that these also were used by the Javanese before their subjection to European rule. The kreeses are not polished, but dipped in lime-juice or other acid matter, which brings out the grain of the steel; and according to the more or less graceful flaming of the grain, the value of the kreeses is enhanced or diminished. Their hilts are often finely carved and set with jewels, and the scabbards are either of wood, of brass, or even of gold, according to the means of their owners. Even if not poisoned, as they sometimes are, these weapons are very dangerous, because of their rough surfaces. But they are hardly ever used except as an ornament, or in case of emergency, which, however, seldom occurs. A kreeses which has pierced a tiger, becomes an object of fond attachment to its owner. The Javanese kreeses are generally about 7 thumbs, or inches long; those of Bally measure from 10 to 11 thumbs.

The Ballinese lances are from 15 to 18 feet long, with steel points, often of snake form and dipped in poison. They are thrown with extraordinary precision and great force, as if they were mere javelins, and the points are just long enough to pierce an enemy right through. Their bows are of hard, tough wood, also of fresh bamboo, and about 4 or 5 feet long. The arrows have bamboo or steel points, often poisoned, and resembling the lance-points. The *Klewangs* are also often poisoned. In the Ballinese wars of 1847 to 1849, the Ballinese and their kinsmen from Lombok had only flints to their muskets, and were but imperfectly acquainted with their use. It was said they looked away from the muzzle when they fired. They had, however, a good supply of powder and shot.

z. *Medicines and Poisons*.—The Javanese women are generally well acquainted with the mixing and administering of poisons. Let their victim be ever so much on his guard, if he does not

actually leave the country, he cannot escape his fate. Some poisons act on the brain only, and render the victim mad. Some very clever native doctors also exist in Java, who have often healed cases where the skill of European medical men fell short. This has been fully recognised by the Colonial and Home Governments, and schools have been founded for the instruction of natives in European pharmacy and medical science; whilst many valuable remedies have been acquired from Javanese sources, among which may be named a remedy against tape-worm. The natives have a simple remedy for less serious cases, consisting in getting all their limbs stretched and folded, so as to regain the necessary pliability. Every finger is then made to crack, every joint is drawn out; and often they have their backs rubbed with the edge of a porcelain cup or bowl, until the skin looks quite red and inflamed: this supplying the place of our Spanish fly.

Conclusion.—A good deal of adverse criticism has often been applied to the manner in which the colony is governed by the Dutch; but, as a rule, those who know Java best, criticise least of all. Mr. Wallace, from whose work, the "*Malay Archipelago*," I have quoted a few figures, is of opinion that it is the best governed colony in the world. Many eminent men agree with him. And indeed, if his test of increased population be applied, we shall arrive at a like result.

There is, however, no doubt that abuses have existed, and that some abuses still do exist. The system of paying taxes, not in money but in labour, which worked so well at its first introduction, is no longer tenable, and is being gradually abolished. Of a system of oppression practised by the Dutch towards the natives, there is no proof whatever. The quietness of the island proves that it does not exist. From one end of Java to the other, the European traveller may go without carrying as much as a pistol with him. Bolts and bars are things unknown in Java, yet robberies and thefts are the exception.

The labourer in the sugar fields is entirely free to work or no, and to demand his own price for his labour. The forced labour which will most likely remain in use, is that of watering the streets twice a-day, a most salutary custom. All the other forced labour is gradually giving way to a system of taxation in money, for which the tax-taking Government provides good roads, good bridges, telegraphs, police, and all other blessings of civilised life.

To the anthropologist Java presents a rich field for research, probably the richest in the world.

DISCUSSION.

Dr. CAMPBELL, R.N., said he considered the age referred to of *maternity* to be too low, though it might be correct to say the women did sometimes *marry* as young as stated. It is generally admitted that conception does not take place till after the appearance of the menses; and from statistics he collected with reference to a neighbouring country ("Edin. Med. Journal," 1862), such would seldom occur before $11\frac{1}{2}$ years.

In describing the propagation of trees by slips, the author had omitted to state that the first act of the process is to remove a narrow circular part of the bark of the branch over which the soil is attached, and that generally the mass is regularly watered for a time, either by hand or any contrivance permitting a drop falling occasionally on it.

The PRESIDENT also made some observations on the paper, and the Director then read the following paper, in the absence of the author:—

The ETHNOLOGY of GERMANY. Part I. The SAXONS of NETHER SAXONY. By H. H. HOWORTH.

AT the accession of Charlemagne the Franks were masters of all Germany, except that portion inhabited by their old and inveterate enemies the Saxons. For 300 years this sister confederacy, which had remained free from the Roman yoke, and free also from Christian influences, had carried on an almost ceaseless and, very often, aggressive war against the Franks; and it was only the persevering effort of the great Karl himself that eventually crushed and incorporated the Saxons.

The Saxon country south of the Elbe, at this time comprised the three provinces of Westphalia, Engern, and Ostphalia. It was bounded on the west by a series of Frankish *gaus* which separated it from the Rhine and from Lake Flevo; and its boundaries may be admirably studied in the 3rd map of the series *Germany in Spruner's new Atlas*. Let us now limit ourselves, for a short time, to Westphalia, which was, apparently, not an old possession of the Saxons, but one which they conquered from the Franks.

The western boundary of Westphalia followed almost in detail the present western boundary of the Prussian provinces of Westphalia and Hanover. It was separated from the North Sea by certain Friesian *gaus*, now forming part of Hanover and Oldenburgh. On the east it was bounded by the Hunte, a tributary of the Weser as far as its sources, and thence roughly by the present boundary of Westphalia, with whose southern limits it was also more or less conterminous. It was therefore watered by the Ems, the Lippe, and the Ruhr.